

SHORTIA

A NEWSLETTER
OF THE
WESTERN CAROLINA BOTANICAL CLUB

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FOR THE CLUB —

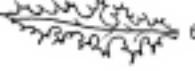
EDITOR - HARVEY KROUSE

LITERARY CRITIC - VERNA KROUSE
AND SECRETARY

WHAT TO SEE IN WINTER

As one would expect, during these years of her professional career, Helen Turner was editor of a publication "The Illinois Prairie Path Newsletter." Your editor is privileged to have copies of a number of informative and delightful issues titled "What to See." So, let us see what there is to see in winter!

Thorns, large and small, are many of our trees and shrubs.

| TALL TREES | |
|-----------------|---|
| 1 |  |
| | Honey Locust Compound thorns on branches and trunk. |
| SMALL TREES | |
| 3 |  |
| | Wild Crab Stiff modified twig. |
| NON-WOODY PLANT | |
| 5 |  |
| | Hawthorn Real thorn. |
| SHRUBS | |
| 7 |  |
| | Blackberry Hooked thorns. Thorny leaves too. |
| 9 |  |
| | Black Raspberry Stiff thorns. Thorny leaves. |
| 2 | |
| |  |
| | Black Locust Paired thorns at leaf base. |
| 4 | |
| |  |
| | Wild Plum Modified twig. |
| 6 | |
| |  |
| | Thistle Even leaves have prickles. |
| 8 | |
| |  |
| | Rose Prickles. |
| 10 | |
| |  |
| | Buckthorn Thorn at end of twig. |

And now as you walk through the winter woods, Helen invites you to identify some common oaks by their buds and acorns. You may not find the Bur oak, since we live in its extreme southern limit.

 **White oak**

The bark of the trunk is gray and flaky, and often appears smooth or rubbed off in patches. The buds are rounded. The acorns, maturing in one year, sprout soon after they fall and may winter-kill unless buried by squirrels.

Bur oak

The bark of the trunk is dark, thick, and deeply furrowed. It insulated the tree against Indian fires and, as a result, bur oaks are generally found on the margins of the groves. This is the tree of the oak-openings, chosen site for pioneer homes. Acorns are very large with a "mosay" cup.

Red oak

The bark of the trunk is dark brown and ridged or furrowed. The buds on the red-brown twigs are pointed. This is the dominant oak of the rich, moist, well-drained forests. The cup of the large acorn is a "saucer."

Black oak

The bark is very dark and deeply furrowed. The inner bark is yellow or orange and was used as a natural dye. Twigs are red-brown with pointed buds. This oak will survive under harsh conditions and is often found on dry or gravelly soil. The cups of the acorns are loose scaled.



White oak



Bur oak



Red oak



Black oak

THE SAXIFRAGES

What are rockbreakers? Miles Peelle tells us in a welcome letter to the editor, who has applied some slight editing.

The Saxifragas* or Rockbreakers growing oftentimes in wet rock crevices, constitute over 700 species of the temperate zone.

Besides the familiar herbaceous forms, the family includes a number of attractive shrubs such as mock orange, currants, and gooseberries as well as the hydrangeas.

Among the herbaceous saxifrages are the delightful plants found in the mountain coves and trails including the spring Foam-flower, Alum-root, and Bishop's Cap.

Another, which presents some difficulty to identify, is Astilbe often confused with Aruncus, a member of the rose family. Astilbe, having the basic saxifrage stamen number of ten and its terminal leaflets with two side lobes, separates it from Aruncus with more than ten stamens. Other than these features, the two plants are much alike, and to some observers they are just "Goat's-beards."

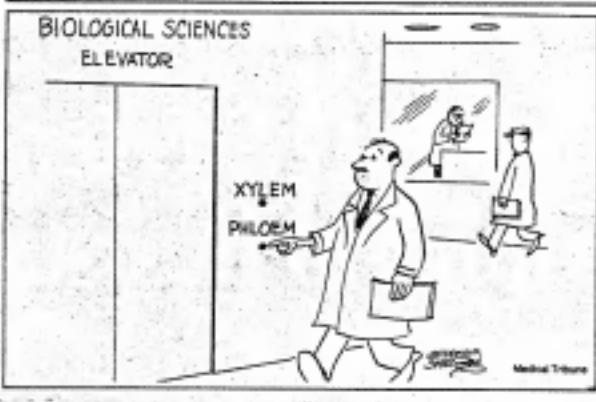
Of all the saxifrages the favorite of many is the Grass-of-Parnassus, which is neither a grass nor a resident of Mt. Parnassus. This late summer bloomer and lover of wet meadows and lake margins is, as its name indicates, named for the famous and sacred mountain in Greece. It is said that the Greek naturalist Dioscorides found it on the mountain, though today it is not found there!

Like saxifrages in general, petals and sepals are in fives. Likewise, the stamens are in fives with alternate staminodes which vary in size in the different species. (A staminode is a sterile structure thought to be the fusion of three stamens; they may be glands.) The center of the Grass-of-Parnassus flower is a lacy area of great beauty and detail under a hand lens.

The petals are white with a surprising green-centerline. No other flower in our area has such a condition and the effect of white and green is most attractive.

Our mountains with thin acid soil limit one species locally to Parnassia asarifolia. In calcareous media found at Gluff Mountain in Ashe County, N.C., Parnassia grandifolia was abundant along the fen margins. Other lime-loving species are found in northern states and Canada.

*Editor's note: name from *saxum*, a stone; and *frangere*, to break. The name derived through the Doctrine of Signatures to European species of the saxifrage family bearing granular bulletts, which were supposed to dissolve urinary stones.



This appropriate cartoon was submitted by Ken Slinish indicating the fact that Bessie has learned her lesson well about the plant vascular system!

UPDATE ABOUT BAT CAVE

As stated in the September issue, the National Conservancy is negotiating with Mrs. Flinck, the owner of the Bat Cave nature area. By a recent phone conversation with Arthur Lawter, the present caretaker for Mrs. Flinck, I learned that although a definite agreement will be consummated, negotiations are still in progress.

Lawter has been approached to serve as caretaker under eventual Conservancy management, but he has at this time not given a commitment. However, he has assured me that he will be able to give permission to any acceptable group to visit the preserve the spring of 1981.

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And now Helen Turner wants to test your ability to identify the trees by their leaves.



Answers will be published in the next issue of Shortis.